

CARBON FOOTPRINT REPORT

2025



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1. BACKGROUND

In our facilities located in Burgos, spanning an area of 42,000 m², which includes a production factory of 12,000 m², we manufacture parts using green sand casting and chemical sand casting technologies. Our modern facilities, operational since 2008, have a melting capacity of nearly 10,000 tons per year and currently serve our customers in various parts of the world. Our goal is to provide highly integrated and valid technical solutions in the field of aluminum casting for diverse industries internationally.



The Environmental Authorization granted to GRUPO ALUMINIOS DE PRECISIÓN, S.L. for the aluminum casting and shaping plant project in the Industrial Zone of Villalonquéjar IV in Burgos, dated December 15, 2010, establishes the procedures for control, monitoring, and surveillance of the environmental conditions described therein.

From the beginning, GAP has considered the care and preservation of the environment as fundamental, implementing efficient and sustainable measures such as advanced sand recovery systems, which achieve the reuse of nearly 100% of the green sand and 80% of the chemical sand.

That is why in 2017, GAP took the initiative to commit to the high standards of the **ISO 14001:2015 standard**, renewing its certification year after year until today, proposing continuous improvement plans, and always demanding **maximum transparency and environmental awareness** from its staff, as well as from its suppliers and customers.



2. GENERAL COMPANY INFORMATION

NAME	GRUPO ALUMINIOS DE PRECISIÓN, S.L.
REGISTERED OFFICE ADDRESS	C/ Merindad de Cuesta Urría, 26 09001 Burgos
VAT/TAX ID	B09471004
PLANT ADDRESS	C/ Merindad de Cuesta Urría, 26 09001 Burgos
ENVIRONMENTAL MANAGER	Miriam Conde
MAIN ACTIVITY OF THE COMPANY	Casting of aluminum parts

3. PURPOSE

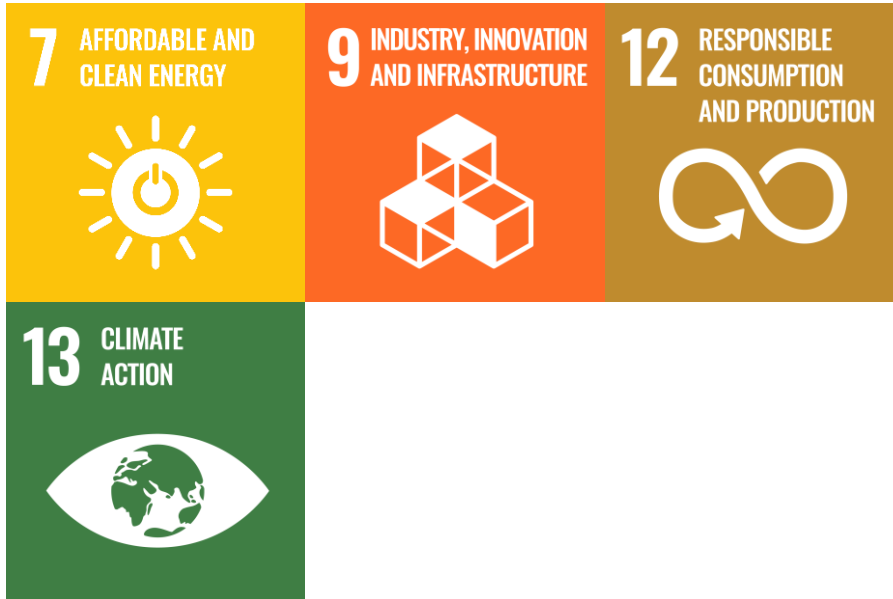
The purpose of this carbon footprint report is to assess the environmental impact of Grupo Aluminios de Precisión, S.L. in terms of greenhouse gas emissions, in order to analyze, evaluate, and address any deviations to comply with current legislation, identify areas for improvement, and align it with the

Sustainable Development Goals (SDGs) established by the United Nations.



By focusing this carbon footprint report on the Sustainable Development Goals, we aim not only to quantify our emissions but also to integrate sustainability across all areas of our company and contribute to the advancement of a more sustainable and resilient global economy.

Through this report, we seek to contribute to the following Sustainable Development Goals (SDGs):



- **Affordable and Clean Energy:** Identifying opportunities to improve energy efficiency and promote the use of cleaner energy sources.
- **Industry, Innovation and Infrastructure:** Encouraging more sustainable and innovative industrial processes that reduce environmental impact.
- **Responsible Production and Consumption:** Optimizing our processes and resources to minimize emissions and waste, fostering more responsible production practices.
- **Climate Action:** Assessing and managing our greenhouse gas emissions as part of our commitment to climate change mitigation.

4. SCOPES AND LIMITS

The present carbon footprint report of GAP, S.L. establishes the limits and scopes of the assessment of greenhouse gas (GHG) emissions generated by our business activities.

Scopes:

In terms of scopes, we have followed recognized international guidelines, specifically the Greenhouse Gas Protocol (GHG Protocol), to ensure consistency and comparability of our results.

We have assessed our emissions in accordance with the three scopes defined by the GHG Protocol:



It includes direct GHG emissions from sources controlled by the company, such as fossil fuel combustion in company-owned facilities and vehicles.

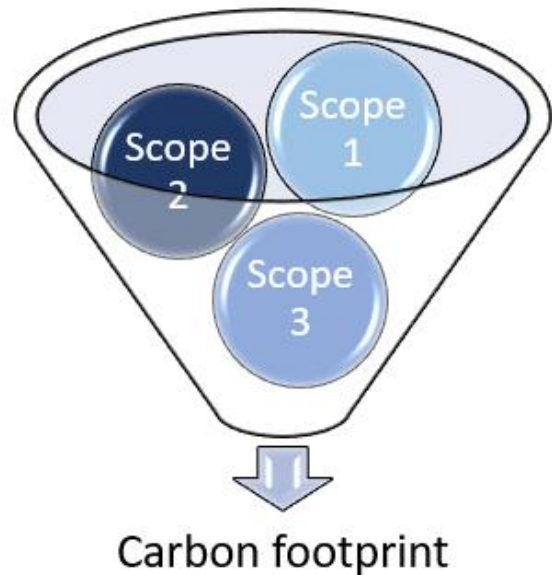


It encompasses indirect emissions associated with the generation of electricity and heat that the company consumes, primarily from external sources such as the power grid.



Other indirect emissions. Some examples of Scope 3 activities include the extraction and production of materials acquired by the organization, business travel using external means of transportation, or fuels used for commuting by staff to their homes.

According to the GHG Protocol, to calculate the Carbon Footprint emitted by the organization, it should be done by summing the data obtained from Scope 1 + Scope 2. Considering the high percentages of CO₂ emitted by aluminum in its production processes, we feel compelled to include the indirect emissions covered in Scope 3, which result from aluminum production by our suppliers.



We deem it necessary to reflect, assess, and address all types of emissions contributing to ecosystem deterioration. Therefore, this carbon footprint report serves as a snapshot of our environmental performance in the year 2025.

Límites:

In our 2025 carbon footprint report, we have accounted for the direct and indirect GHG emissions associated with our core operations, which include casting, aluminum component shaping, and subsequent wholesale distribution, all carried out at our plant located in Burgos.

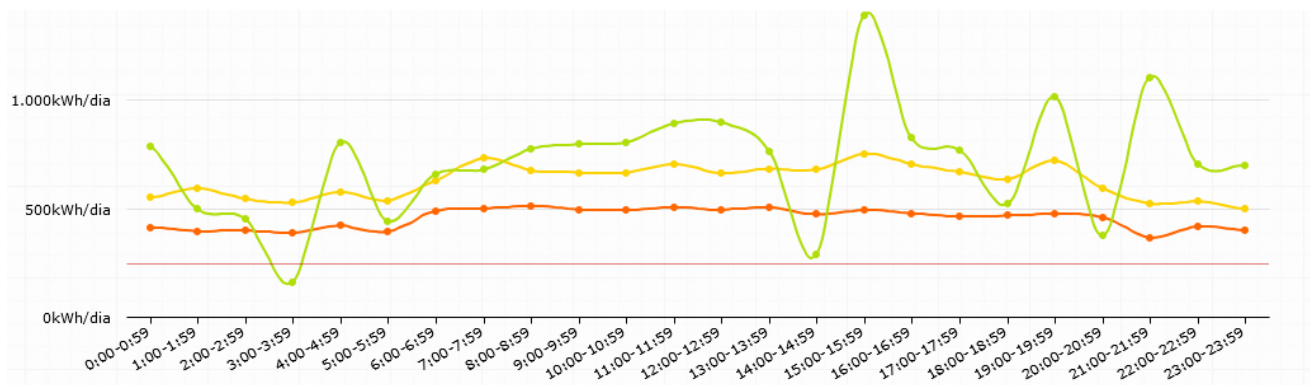
Since the start of our machining operations, now integrated into our process, we have observed significant adjustments in our emissions balance. Specifically, Scope 2 emissions have increased due to the electricity consumption associated with this new activity, while Scope 1 emissions have decreased thanks to the reduction in road transportation to external suppliers.

It is important to note that, starting in 2023, the ratio of CO₂ equivalent tons per ton of aluminum produced (t CO₂ eq/t Al) is no longer comparable with previous years, as part of the aluminum production now includes an additional operation performed in-house: machining.

The scope of our services has expanded, transitioning in some cases from the production of raw parts to the delivery of machined components, thereby increasing the added value of our products.

Additionally, since March 2024, **two new robotic cells** have been operational, followed by an additional cutting and deburring cell in February 2025, contributing to the automation of critical tasks in our process. While these cells significantly increase compressed air consumption, they represent an advancement in the efficiency and precision of our operations.

In our analysis, we have considered emissions arising from energy generation, the production of goods and services, freight transport, fossil fuel consumption, and waste management, reflecting the full impact of our updated operations.



The data and results presented are based on information collected from invoices associated with consumption and our own measurement system during this period. These data are subject to revision, and our measurement systems include an integrated setup that monitors energy consumption in real time. This allows us to detect and control potential system deviations, assess risks and opportunities for improvement, and maintain thorough control over the amount of energy we use.

5. ESTIMATION OF CARBON FOOTPRINT

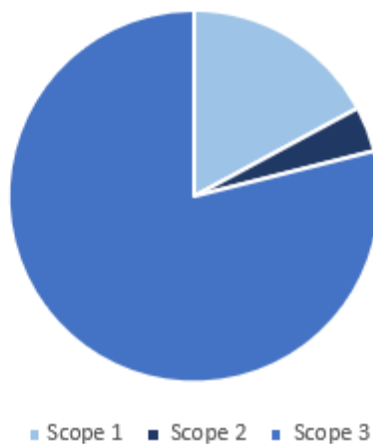
To verify and analyze the carbon footprint of the company, the formula defined by the GHG Protocol has been used.

$$\text{CARBON FOOTPRINT} = \text{Activity data} \times \text{Emission Factor}$$

The results of the three scopes have been collected and presented in a comprehensive manner, obtaining the data from our measurement systems and/or invoices, and applying a conversion factor for each of them based on their emissions.

In an initial analysis, we can see that Scope 3 significantly surpasses the emissions released into the environment compared to the other two scopes.

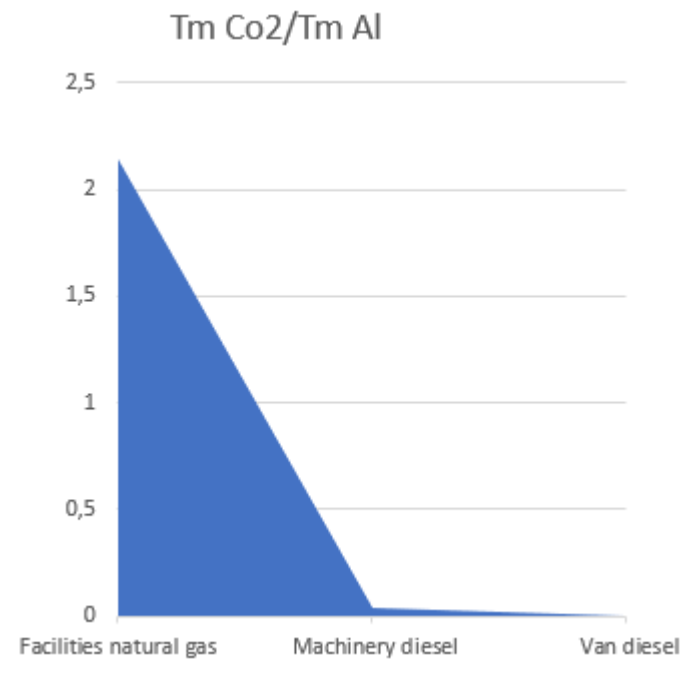
Next, we proceed to detail the results obtained through the different scopes:



5.1 Scope 1

Regarding the direct emissions covered in Scope 1, at GAP we have identified three main emission factors: diesel fuel used for road transportation, diesel fuel used for machinery in the plant, and natural gas used in the facilities.

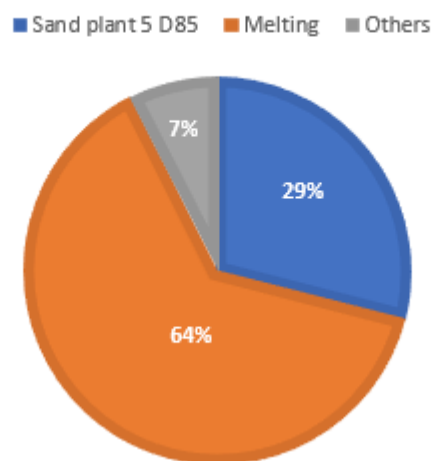
The use of natural gas accounts for almost the entirety of Scope 1 CO2 emissions, as the company has office air conditioning, meeting rooms, changing rooms, and a dining area in its facilities. In the production processes, we have four furnaces for molding parts that operate on natural gas, resulting in a significant consumption. In exceptional cases, such as supply cuts or external circumstances beyond the organization's control, the furnaces can operate using diesel fuel as an emergency measure, although this scenario did not occur in 2025.



For loading, unloading of materials, and production operations, we have a total of eight forklift trucks, and for external logistics operations, we have one N1 category vehicle. Both the internal machinery and the road transport vehicle operate on diesel fuel (E5), which the company stores for subsequent use.

The aforementioned results were obtained using the Carbon Footprint Calculator provided by the Ministry of Ecological Transition of the Government of Spain.

GAS CONSUMPTION DISTRIBUTION



In our production process, sand recovery plays a fundamental role in our sustainability strategy. **Currently, we achieve a 92% recovery rate of the sand used**, significantly minimizing the need for new

resource extraction and reducing the associated environmental impact. This percentage underscores our commitment to circular economy principles and responsible material management.

In the previous fiscal year, the sand thermal recovery process accounted for approximately 49% of the organization’s total natural gas consumption, due to the high energy demand required to ensure process efficiency and quality.

Within the framework of our Reduction Plan, we set the objective of “**Improving the thermal efficiency of sand recovery,**” with full implementation scheduled for October 2025. The measures carried out have allowed us to anticipate and consolidate this improvement, reducing the sand plant’s share of total gas consumption to 29%, without any significant increase in other gas usage.

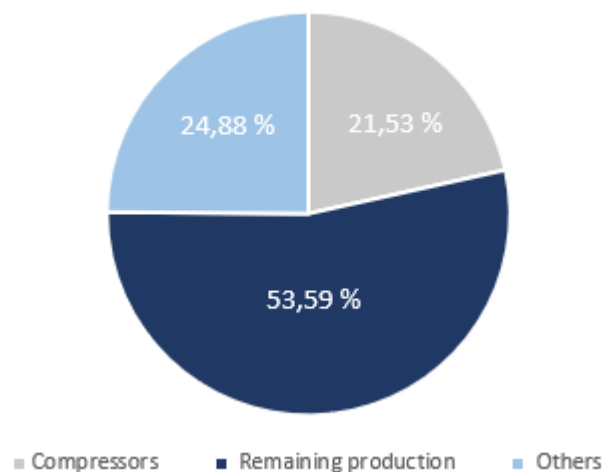
This 20-percentage-point decrease compared to the previous year demonstrates the effectiveness of the measures implemented, achieving a high recovery rate of 92% while significantly reducing the associated energy consumption and, consequently, the emissions from natural gas use.

This advancement represents a significant milestone in our decarbonization strategy and highlights the positive impact of planning and executing energy efficiency improvements on our carbon footprint.

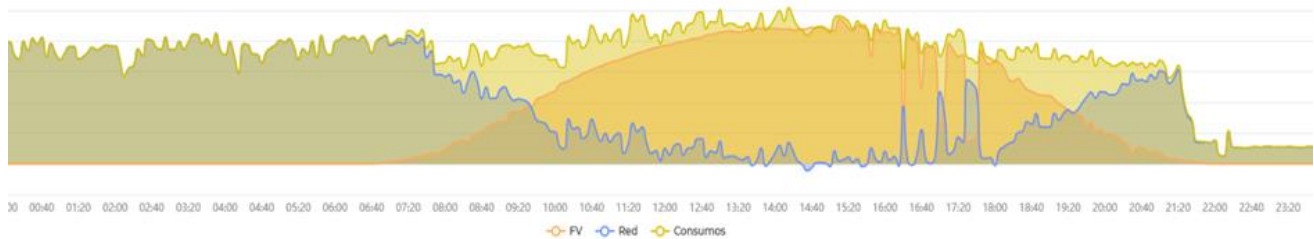
5.2 Scope 2

According to the GHG Protocol, Scope 2 requires us to calculate the indirect emissions that the company should consider. At GAP, our emissions in this scope are mainly related to the purchase of electricity to power our facilities. The graph below illustrates the total electricity consumption in 2025.

*Percentages over the total amount of electricity used in the plant



In 2022, the project for a **photovoltaic solar installation with a capacity of 1.5 MW** was launched. Although by 2023 only 50% of the installed panels were operational, it managed to generate approximately 770,000 kWh. Finally, this installation reached full operational capacity in January 2024, allowing it to generate approximately 1,100,000 kWh during that year.



In 2025, it generated 1,050,000 kWh. It is worth highlighting that during the six months with the most sunlight in our country, from March to September, the photovoltaic installation is capable of supplying 100% of the electricity demand during the peak hours of the day.

This progress significantly contributes to reducing emissions and reinforces our commitment to a more sustainable future.

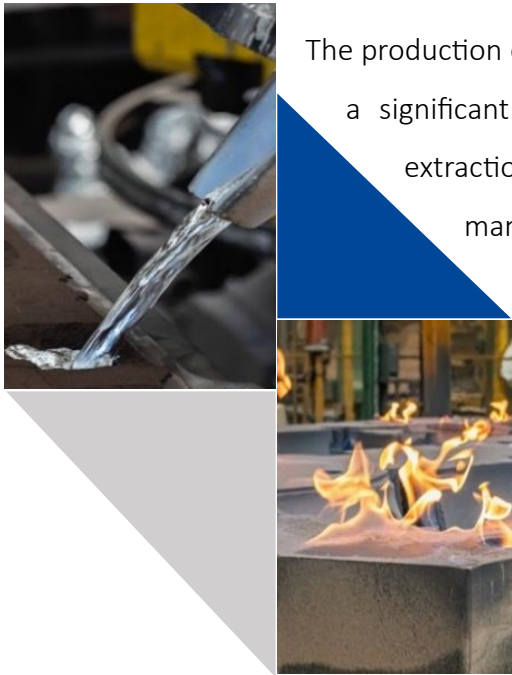


5.3 Scope 3

In Scope 3 of the carbon footprint, we analyze the indirect emissions that are generated due to activities not directly controlled by the company but are related to our supply chain, goods transportation, and/or consumables.

The use of aluminum in our casting and shaping processes significantly contributes to greenhouse gas emissions.

At GAP, we prioritize the excellence of raw materials to ensure that our customers receive products of superior quality. That's why we work with primary aluminum ingots, avoiding the use of secondary or recycled aluminum, which would diminish the quality of our final product.



The production of primary aluminum requires large amounts of energy and emits a significant amount of greenhouse gases throughout its process, from extraction to refining and electrolysis. The process used for ingot manufacturing only exacerbates the high percentage of emissions reflected in our report. During 2024, the average emissions of the aluminum purchased by GAP were 11,37 tCO₂ emitted per tonne of aluminum produced.

Green Aluminum Usage: A Crucial Step Toward Reducing Our Carbon Footprint

In our ongoing efforts to mitigate the environmental impact of our operations, 2024 marked the implementation of a key strategic shift: the integration of green aluminum into our supply chain. This advancement represents a significant stride toward sustainability and stands out as a highlight of our environmental commitment in this report.

Traditional aluminum used in industrial processes typically has an average carbon footprint of approximately 16 metric tons of CO₂ emitted per metric ton of aluminum produced. In 2024, we

successfully introduced a type of aluminum with a significantly lower carbon footprint of just 4,9 metric tons of CO₂ emitted per metric ton of aluminum produced. This change has substantially reduced the emissions associated with our activities.



Specifically, approximately **55%** of the total aluminum purchased in 2025 corresponds to this green **aluminum**, supplied by several of the most important clients in our commercial portfolio. This represents a 10% increase compared to 2024.

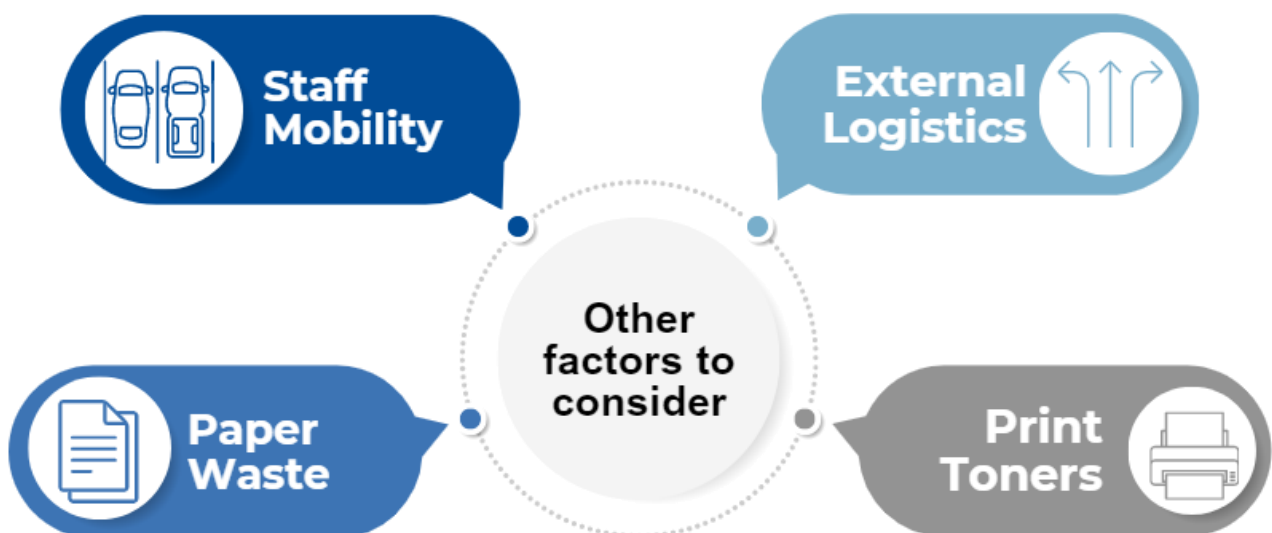
While this percentage does not yet represent the entirety of our purchases, it is a remarkable step forward in the decarbonization of our operations.

The positive impact of this transition goes beyond the immediate reduction in our emissions, as it also lays the foundation for a more sustainable future. We are actively engaging in discussions with more clients and partners with the goal of increasing the proportion of green aluminum in 2026 and beyond.

We aspire to establish agreements that will allow us to further increase the use of low-carbon materials, thereby reinforcing our commitment to sustainability and the fight against climate change.

This step not only reflects our efforts to align our operations with global emission reduction goals but also our conviction that industrial development and sustainability can and must coexist. We will continue working to lead by example, promoting responsible practices that benefit both the environment and our industry.

While aluminum is our main focus, in Scope 3 there are other factors that we have considered and set as objectives to reduce our carbon footprint. Some of these factors include:



Staff Mobility: We are committed to promoting more sustainable transportation options, such as the use of public transportation or carpooling, with the aim of reducing our emissions associated with staff mobility.

Goods Transportation: Logistics and goods transportation also have a significant impact on our carbon

footprint. We work closely with our suppliers and logistics partners to optimize routes, improve efficiency in loading and unloading, and prioritize the use of more sustainable transportation methods.

Paper Consumption: We implement paper reduction practices in our operations, encourage the digitization of documents, and promote awareness and education among our employees to reduce unnecessary paper usage.

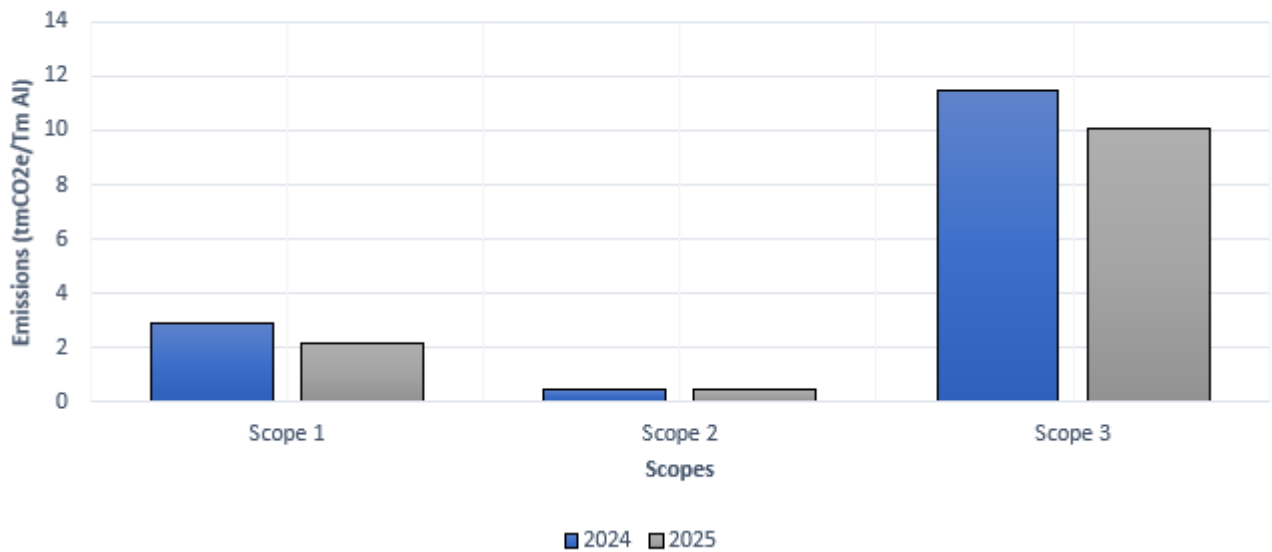
Printer Toner Consumption: Printer toner consumption also contributes to our carbon footprint due to associated manufacturing and disposal processes.

6. OVERALL RESULTS AND COMPARATIVE ANALYSIS OF PREVIOUS YEAR



			2025 tmCO ₂ e/ Tm Al	%	2024 tmCO ₂ e/ Tm Al	%
Scope 1 (Direct emissions)	Facilities	Natural gas	2,1454		2,8858	
	Road transport	Diesel	0,0002		0,0002	
	Machinery operation	Diesel	0,0399		0,0419	
SUBTOTAL			2,19	17,15%	2,93	19,68 %
Scope 2 (Indirect emissions)	Purchased energy	Electricity	0,50		0,4702	
SUBTOTAL			0,50	3,93%	0,4702	3,16%
Scope 3 (Other indirect emissions)	Process	Aluminium	9,96		11,37	
	Goods transportation	Gasoline	0,0517		0,0559	
	Staff Mobility	Gasoline	0,0449		0,0509	
	Consumables	Paper	0,0001		0,0002	
SUBTOTAL			10,05	78,91%	11,48	77,16%
TOTAL			12,74	100%	14,88	100%

Comparison of Emissions by Scope: 2024 vs 2025



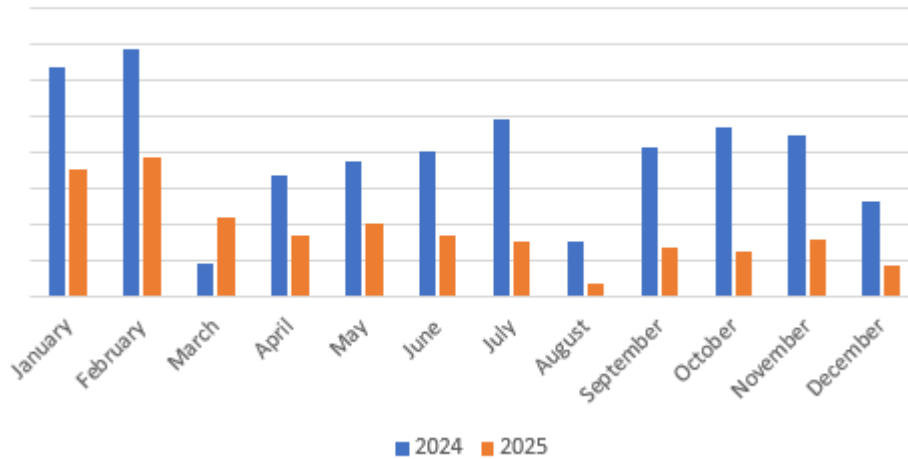
7. FOLLOW-UP ON IMPROVEMENTS PLANNED IN THE PREVIOUS YEAR

During the year 2025, we have made significant progress on the actions proposed in the previous report. Below, we detail the level of compliance:

1. **Purchase of low carbon footprint aluminum:** We have purchased 10% more low-carbon aluminum than in the previous year. In addition, we are working on expanding agreements for 2026 and subsequent years.
2. **Sale of energy surpluses to the general grid:** The project received initial approval from the Junta de Castilla y León. However, given the wait for final authorization and the need to focus our efforts on other strategic areas, this year we have not prioritized advancing the sale of surpluses.
3. **Improvement of the Thermal Efficiency of Sand Recovery:** Action implemented. Approximately a 54% reduction in gas consumption in this process has been achieved. Graphical evidence is provided to support its fulfillment.

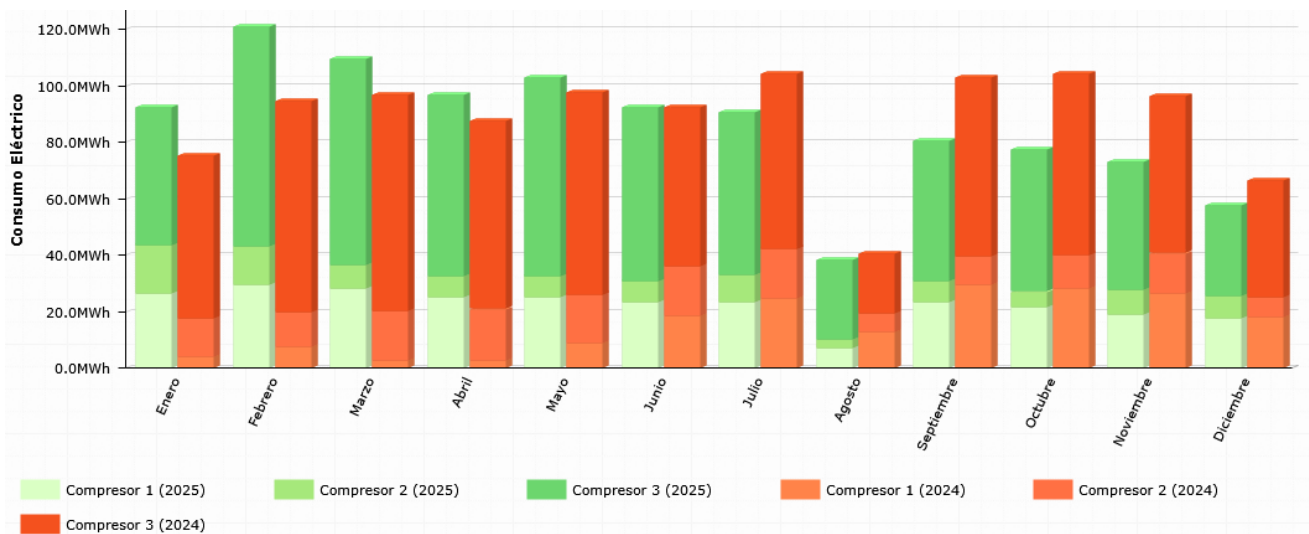
Two main lines of action have been pursued in this regard: the first concerns the efficiency of the equipment dedicated to sand thermal recovery (insulation, burners, etc.), and the second relates to the percentages of different types of sand in the mixture used for our processes.

Gas consumption – Sand Plant 5D85



4. **Improvement of Compressed Air Consumption:** Action implemented. We have reduced our consumption by between 5% and 10%. Graphical evidence is provided to support its fulfillment.

This mainly involves the installation of a buffer tank in the area farthest from the compressors, to prevent them from operating in short, frequent bursts.



8. OBJECTIVES – REDUCTION PLAN

After thoroughly analyzing the data, we have identified key areas for improvement.

To address this challenge and move towards reducing our carbon footprint, we aim to achieve these milestones by following the following roadmap:

PURCHASE OF ALUMINIUM WITH A LOW CARBON FOOTPRINT

Expansion of agreements

2026 and beyond

In line with our commitment to reducing environmental impact, we continue to prioritize the acquisition of low carbon footprint aluminum, as highlighted in last year's report. To date, we have successfully consolidated agreements with several clients, and we plan to expand this initiative to more clients during 2026 and subsequent years.

We receive monthly certificates that support the origin and characteristics of the material purchased, which strengthens the traceability and reliability of our purchases.

This year, we reaffirm our intention to continue with this course of action, expanding our efforts to involve more clients in this transition towards more sustainable aluminum.

IMPROVEMENT OF THE THERMAL EFFICIENCY OF SAND THERMAL RECOVERY

100% operational

September-2026

We will continue working on two main lines of action: the first concerns the efficiency of the equipment dedicated to sand thermal recovery (insulation, burners, etc.); the second relates to the proportions of different types of sand in the mixture used for our processes.

Specifically, we are conducting trials to develop a more energy-efficient mixture for our machining processes, using a higher proportion of mechanically recovered sand. For this, the granulometry of our sands must be precisely defined, which entails investments in the extraction of fine particles.

The investment in a second core shooter and a fourth automatic deburring cell allows us to eliminate night and weekend shifts. This makes it possible to turn off the compressors and other auxiliary machines.

9. IMPROVEMENT STRATEGY

As part of our ongoing commitment to process improvement and sustainability, next year we will make two key investments aimed at increasing the efficiency and quality of our operations:

1. **Installation of new extraction systems:** We will incorporate high-efficiency extraction systems that will significantly improve the plant's hygiene levels. Although these systems are designed to optimize energy consumption, their combined power will amount to 50 kW, representing a significant increase in electricity consumption.
2. **Integration of a robotic cell:** In February 2025, the fourth automatic deburring cell, which also performs feed cutting, entered into service. Generally, this type of cell consumes a large amount of compressed air.

Despite the impact these investments will have on energy consumption, we remain committed to efficiency and sustainability. Therefore, we set a key goal of **maintaining electricity consumption per ton produced (kW/Tm) at the same level as in the current year**, despite the increase in equipment. Additionally, we will continue to prioritize the optimization of our thermal processes, aiming to **reduce gas consumption per ton produced (kW/Tm) by 3%**.

With these initiatives, we reaffirm our dedication to balancing innovation, efficiency, and respect for the environment.

BIBLIOGRAPHY

- GAP Environmental Portal. **Grupo Aluminios de Precisión S.L.** Recovered from: <https://www.alu-gap.com>
- Sustainable Development Goals. **UN.** Recovered from: <https://www.un.org/sustainabledevelopment/>
- “GUÍA PARA EL CÁLCULO DE LA HUELLA DE CARBONO Y PARA LA ELABORACIÓN DE UN PLAN DE MEJORA DE UNA ORGANIZACIÓN”. **Oficina Española de Cambio Climático. Ministerio para la Transición Ecológica.** Recovered from: https://www.miteco.gob.es/es/cambio-climatico/temas/mitigacion-politicas-y-medidas/guia_huella_carbono_tcm30-479093.pdf
- “FACTORES DE EMISIÓN, REGISTRO DE HUELLA DE CARBONO, COMPENSACIÓN Y PROYECTOS DE ABSORCIÓN DE DIÓXIDO DE CARBONO”. **Oficina Española de Cambio Climático. Ministerio para la Transición Ecológica.** Recovered from: https://www.miteco.gob.es/es/cambio-climatico/temas/mitigacion-politicas-y-medidas/factoremission_tcm30-479095.pdf
- “Calculadora de Huella de Carbono para organización. Alcance 1 + 2. (Factores de emisión correspondientes al año 2007-2024)”. **Ministerio para la Transición Ecológica y el Reto Demográfico.** Recovered from: https://www.miteco.gob.es/content/dam/miteco/es/cambio-climatico/temas/mitigacion-politicas-y-medidas/calculadora_hc_tcm30-485617.xlsx
- “The Greenhouse Gas Protocol. A Corporate Accounting and Reporting Standard (Revised edition)” (2001). **Greenhouse Gas Protocol.** Recovered from: <https://ghgprotocol.org/corporate-standard>
- Mettering Energygest de Grupo Aluminios de Precisión S.L. **Telegest.** Recovered from: <https://telegest.energygest.com/>
- “Informe Sostenibilidad de la Asociación Española del Aluminio” (2021). **ASOCIACIÓN ESPAÑOLA DEL ALUMINIO Y TRATAMIENTOS DE SUPERFICIE.** Recovered from: <https://www.asoc-aluminio.es/#>
- Low-carbon and recycled aluminium. **HYDRO.** Recovered from: <https://www.hydro.com/en-ES/aluminium/products/low-carbon-and-recycled-aluminium/>
- Sustainable Products. **ALCOA.** Recovered from: <https://www.alcoa.com/products/sustana>
- Intelligent Energy Management Platform. Recovered from: <https://www.isolarcloud.com/>